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EXAMINER

HOANG, THAI D

ART UNIT

PAPER NUMBER

2662

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Please find below and/or attached an Office communication concerning this application or proceeding.

7/11

# Office Action Summary

Application No.

09/274,797

Applicant(s)

STORR, MORTEN

Examiner

Thai D Hoang

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because of informalities shown in the form PTO-948. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Specification*

2. The disclosure is objected to because of the following informalities:

a. The phrase "The second service class, variable but rate (VBR) identifies..." in the page 8, second line should be change to "The second service class, variable bit rate (VBR) identifies..."

b. In the page 10, lines10-12, the statement: "In general, if the RM data in the cell 303 indicates a higher data rate than is indicated by the RM data in the database 314, the rate indicated by the cell 303 is lower" does not make sense.

c. Figure 3 does not indicate the item 309 as disclosed in the pages 9 (line 17) and 10 (line 24)

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 17-18 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 17, the term "second source virtual channel" and "second destination virtual channel" are not clear. The applicant does not adequately describe these terms in the specification.

Regarding claim 18, the terms "the third control cell" is not clear. The specification does not adequately define this term.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 10, the statement "the switching circuitry comprising circuitry to exchange data and control cells between the source and the destination virtual channel" is not clear. It does not make sense what is meant by exchanging and controlling cells between "the source" and "the destination virtual channels."

As a result, claims 11-15 are rejected because they depend on rejected claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-16 are rejected under 35 U.S.C. 102(e) as being unpatentable over Lincoln, U.S patent No. 6,301,226.

5. Regarding claim 1, Lincoln discloses a method and system, which is called "Asynchronous Transfer Mode System and Method". Lincoln's method comprises steps of: receiving a control cell on the first source virtual channel (column 5 from line 57; column 7 lines 5-9); generating and processing the management to determine the first resource management data (see column 6 lines 25-29 and from line 61); receiving a

second control cell on a second virtual channel, which is associated with a destination node (column 7, lines 5-21); modifying the second control cell, then transmitting the modified cell over the first virtual channel (column 7, lines 22-20; column 10 from line 60; column 11, lines 1-30.)

6. Regarding claim 2, Lincoln's method inherently uses Asynchronous Transfer Mode (ATM) in both forward and backward resource management cells, since Lincoln's method adapts with the ATM system (abstract.)

7. Regarding claim 3, Lincoln discloses the first resource management data stored in a database (element 154, figure 6) and retrieving the first resource management data from the database using virtual channel associated with the second control cell (column 11, lines 1-30)

8. Regarding claim 4, Lincoln's method comprises a placing virtual channel identification data in a queue (element 73, figure 3), and removing the virtual channel identification data from the queue, and processing the data using a rate control algorithm (from line 31 column 7 to line 27 column 10.)

9. Regarding claim 5, Lincoln discloses the first and second virtual channel comprise a segment of an end-to-end virtual channel operatively coupling the source node and destination node (figures 2, 5, 6 and column 7, lines 5-30.)

10. Regarding claim 7 and 8, Lincoln discloses that a forward resource management cell comprises an explicit rate parameter and a congestion parameter and modifying these parameters in the backward resource management cell (abstract, column 7, from line 10, figures 10-13)

11. Regarding claim 10, Lincoln discloses a system, which comprises a source port circuitry to send and receive control cells on a source virtual channel; a destination port circuitry to send and receive control cells over a destination virtual channel (figures 2, 3, and 6, column 4 from line 40, column 5 from line 57); a switch circuitry couples a source port and a destination port, which comprises a circuitry to exchange data and control cells between a source and a destination (figures 2 and 5); a management portion couples to the source port to receive a control cell and compute resource management (figures 2 and 6); a return cell circuitry to receive control cells from a destination port, to modify control cells based on the resource management data computed, and to provide the modify control cells to a source port over source virtual channel (figures 2 and 6; from line 5 column 7 to line 27 column 10; from line 60 column 10 to line 16 column 11.)
12. Regarding claim 11, Lincoln's system comprises a processor, which is connected to a memory (figure 2), the memory stores instructions to configure the processor to compute and store resource management data (elements 75 in figures 3 and 106 in figure 4.)
13. Regarding claim 12, the instructions in Lincoln's system inherently associate resource management data to control information in control cells.
14. Regarding claim 13, Lincoln discloses a system, which comprises a shared processor coupled to a memory (figure 2)
15. Regarding claim 14, Lincoln's system inherently shares transmission circuitry by a physical link from a source to destination to get beneficial for economic reasons.

16. Regarding claim 15, both data cells and control cells in Lincoln's system are ATM cells, since Lincoln discloses a method for ATM system (abstract.)

17. Regarding claim 16, Lincoln discloses a method and system, which comprises:

a. establishing a plurality of source virtual channel and destination virtual channels, each source virtual channel being paired with a destination virtual channel to form a cell transmission path operatively coupling a source node to a destination node through a switch (abstract; figures 3 and 4; column 4 from line 48; column 5 from line 57)

b. receiving a control cell on the first source virtual channel (column 6 lines 25-29 and from line 61.)

c. generating a management upon receipt of the control cell (column 6 lines 25-29 and from line 61.)

d. processing the management to determine the first resource management data (column 6 from line 61)

e. storing the resource management in database (element 154 figure 6), the resource management data associates with the first source virtual channel and paired with the first destination virtual channel (figures 2 and 6; column 5 from line 56; column 10 from line 60.)

### ***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the



invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lincoln as applied to claim 9 above, and further in view of Jain, U.S Patent No. 5,805,577.

Lincoln does not disclose the explicit rate indication for congestion avoidance in ATM networks (ERICA) algorithm is used to update a resource management data. However, Jain discloses a method, which is called "ERICA: Explicit Rate Indication for Congestion Avoidance in ATM network". Jain uses the explicit rate indication for congestion avoidance in ATM networks (ERICA) algorithm to update a resource management data.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt Jain's method into Lincoln's system in order to obtain the optimum traffic in the network.

### ***Conclusion***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to the application:

US patent No. 5,991,265 to Lincoln

US patent No. 6,088,359 to Wicklund et al

US patent No. 6,011,777 to Kunzinger

US patent No. 5,675,576 to Kalampoukas et al

US patent No. 5,991,268 to Awdeh et al


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20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D Hoang whose telephone number is (703) 305-3232. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703) 305-4744. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9314 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Thai Hoang  
March 22, 2002

  
THAI HOANG  
Examiner

**Attachment for PTO-948 (Rev. 03/01, or earlier)**  
**6/18/01**

**The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.**

**INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

**1. Correction of Informalities -- 37 CFR 1.85**

New corrected drawings must be filed with the changes **incorporated** therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

**2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.**

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

**Timing of Corrections**

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.